

# **Road Services Division 2010 Collision Data Report**



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## **1.0 INTRODUCTION**

The King County Department of Transportation (KCDOT) is pleased to present the 2010 Collision Data Report. This report is prepared by the Road Services Division's Safety and Asset Inventory Unit of the Roads Maintenance and Operations Section.

This report was prepared to provide collision and safety information to elected officials, King County DOT staff and the public.

The collision information provided in this report comes from the Washington State Department of Transportation (WSDOT) Collision Location Access Software (CLAS) database. Collision location data for accidents occurring between 2003 and 2010 were entered into the WSDOT Collision Location Coding Form (CLCF) by King County DOT staff. The information was obtained directly from collision reports prepared by the responding Officer at the scene of the collision. In order to be entered into the database, a collision must occur on a county-maintained roadway within unincorporated King County, and must meet the reporting threshold of \$700 in property damage or result in an injury or fatality.

Changes in the 2010 data methodology: Prior to 2010, traffic counts from local access roadways (those roadways where the Federal Functional Classification translates into urban local access or rural local access) included traffic counts taken on specific arterial roadways. The 2010 traffic count data has eliminated these counts from these roadways, resulting in lower Average Daily Volumes and annual Million Vehicle Miles Traveled (VMT).

### **This information is a snapshot of the CLAS database as of September, 2011**

Other information used in this report is courtesy of several local agencies, including the State of Washington's Office of Financial Management for population data, the County Road Administration Board (CRAB), the Washington State Department of Transportation, and the Road Services Division's Traffic and Engineering Services section for roadway miles maintained by King County, and the Roads Maintenance and Operations Section for traffic count data.

A report is only as good as the data that it utilizes. For this reason it is important to be aware of the quality and limitations of the data in this report. While significant effort is directed toward quality control, databases of this size inherently contain data entry errors. The Officer's reports may also contain errors. Despite this, the overall quality of the data is considered acceptable for the purposes of this report.

## 2.0 EXECUTIVE SUMMARY

### 2.1 Collision Severity

**Table 2.1.1**  
**2010 Collisions By Severity**

<b>Most Severe Injury</b>	<b>Number of Collisions</b>
Dead at Scene	4
Dead on Arrival	1
Died in Hospital	3
Serious injury	56
Evident Injury	200
Possible Injury	344
No Injury	1133
Total	1741



## 2.2 Trends

**Table 2.2.1**  
**Collision Rate per Million Vehicle Miles Traveled**

Year	Total Collision Reports	Average Daily Traffic Volumes (ADT)	Maintained Road Miles	Annual Million Miles Driven	Collision Rate
2002	2,618	3,658	1,895	2,529	1.04
2003	2,753	3,879	1,883	2,666	1.03
2004	2,736	3,944	1,859	2,676	1.02
2005	2,896	3,902	1,856	2,642	1.10
2006	2,883	4,089	1,849	2,758	1.05
2007	2,655	4,373	1,855	2,959	0.90
2008	2,357	4,034	1,758	2,588	0.91
2009	2,130	3,667	1,743	2,332	0.91
2010	1,741	2,377	1,632	1,416	1.23

**Table 2.2.2**  
**Collision Rate per 100,000 Population**

Year	Population	All Collision Types		Pedestrian		Bicycle	
		Collisions	Collisions per 100,000 Population	Collisions	Collisions per 100,000 Population	Collisions	Collisions per 100,000 Population
2002	351,675	2,618	744	43	12.23	36	10.24
2003	351,843	2,753	782	39	11.08	23	6.54
2004	356,795	2,736	767	35	9.81	28	7.85
2005	364,498	2,896	795	41	11.25	27	7.41
2006	367,000	2,883	786	36	9.81	26	7.08
2007	368,300	2,655	721	43	11.68	26	7.06
2008	341,150	2,357	691	39	11.43	26	7.62
2009	343,180	2,130	621	35	10.20	17	4.95
2010	284,100*	1,741	613	28	9.86	24	8.45

\*Note: The total population of unincorporated KC declined due to recent annexations to Kent and Kirkland, resulting in a decline in total collision reports.

**Table 2.2.3**  
**Road Miles By**  
**Federal Functional Classification (FFC)**

2010 Total Centerline Miles	1632.2	
Federal Function Classification (FFC)		
Description	Federal Functional Classification	# of Miles
Rural		
Major Arterial	2	0.00
Minor Arterial	6	34.0
Major Collector	7	111.5
Minor Collector	8	119.6
Local Access	9	399.4
Total		664.5
Urban		
Principal Arterial (freeways)	12	0
Principal Arterial (other)	14	46.7
Minor Arterial	16	80.9
Collector	17	92.6
Local Access	19	747.5
Total		967.7

**Table 2.2.4**  
**2010 Annual Million**  
**Vehicle Miles Traveled (VMT)**

<b>FFC</b>	<b>Road Miles</b>	<b>Annual Average Daily Traffic Volumes</b>	<b>Annual Million VMT</b>
6	34	5,305	66
7	111	2,276	92
8	120	1,526	67
9	399	636	93
14	47	14,604	251
16	81	6,906	204
17	93	3,901	132
19	747	1,875	511
<b>Total</b>	<b>1632</b>	<b>2,377</b>	<b>1,416</b>

*Presentation Changes 2010: Table 2.2.4 – 2010 Annual Million Miles Traveled (VMT) eliminated arterial counts from Local Access Federal Function Classifications, resulting in lower Average Daily Volumes and Annual Million VMT.*

## 2.3 Collisions

**Table 2.3.1**  
**2010 Collisions by First Collision Type**

Collision Type	# of Collisions	Percentage
Fixed object	563	32.3
Rear - end	382	22.0
Entering at angle	204	11.7
Hit Parked Car	135	7.7
Left turn	96	5.5
Vehicle overturned**	61	3.5
Driveway Exiting	58	3.3
Other	49	2.8
Sideswipe	51	3.0
Head On	28	1.6
Pedestrian	28	1.6
Bicycle	24	1.4
Driveway Entering	23	1.3
Right Turn	15	0.9
Leaving Parked Position	14	0.8
Animal	10	0.6
Total	1741	100.0

*\*\*Vehicle overturned includes motorcycle collisions.*

**Table 2.3.2**  
**2010 Collisions By Severity**

	<b>Collisions</b>			
	<b>Total</b>	<b>Pedestrian*</b>	<b>Bicyclist</b>	<b>Motorcyclist</b>
Collisions	1741	28	24	51
Injury Collisions	600	27	23	38
Fatal Collisions	8	1	1	2
Property Damage Only	1133	0	0	11
Percent of Collisions	100.00%	1.61 %	1.38 %	2.93 %
Percent resulting in injury	34.46 %	96.43 %	95.83 %	74.51 %
Percent resulting in death	0.46 %	3.57 %	4.17 %	3.92 %

*\*Where first collision type is pedestrian involved*

**Table 2.3.3**  
**2010 Fatalities By Person**

<b>Person</b>	<b>Fatalities</b>
Motor Vehicle Driver	4
Pedestrian	1
Bicyclist	1
Motorcyclist	2
Passenger	0
<b>Total</b>	<b>8</b>

### 3.0 COLLISION TRENDS

#### 3.1 Collision, Fatality, and Fatal Collision Rates

**Table 3.1.1**  
**Collision Rate per Million Vehicle Miles Traveled (VMT)**

Year	Total Collision Reports	Maintained Road Miles	Annual Million Miles Driven	Collision Rate
2002	2,618	1,895	2,529	1.04
2003	2,753	1,883	2,666	1.03
2004	2,736	1,859	2,676	1.02
2005	2,896	1,856	2,642	1.10
2006	2,883	1,849	2,758	1.05
2007	2,655	1,855	2,959	0.90
2008	2,357	1,758	2,588	0.91
2009	2,130	1,743	2,332	0.91
2010	1,741	1,632	1,416	1.23

**Table 3.1.2**  
**Collision Rate per 100,000 Population**

Year	Population	All Collision Types		Pedestrian		Bicycle	
		Collisions	Collisions per 100,000 population	Collisions	Collisions per 100,000 population	Collisions	Collisions per 100,000 population
2002	351,675	2,618	744	43	12.23	36	10.24
2003	351,843	2,753	782	39	11.08	23	6.54
2004	356,795	2,736	767	35	9.81	28	7.85
2005	364,498	2,896	795	41	11.25	27	7.41
2006	367,000	2,883	786	36	9.81	26	7.08
2007	368,300	2,655	721	43	11.68	26	7.06
2008	341,150	2,357	691	39	11.43	26	7.62
2009	343,180	2,130	621	35	10.20	17	4.95
2010	284,100	1,741	613	28	9.86	24	8.45

**Table 3.1.3**  
**Fatal Collisions and Fatalities**

	<b>All Collision Types</b>		<b>Pedestrian</b>		<b>Bicycle</b>	
<b>Year</b>	<b>Fatal Collisions</b>	<b>Fatalities</b>	<b>Fatal Collisions</b>	<b>Fatalities</b>	<b>Fatal Collisions</b>	<b>Fatalities</b>
2002	13	14	1	1	0	0
2003	15	17	0	0	1	1
2004	21	25	2	2	0	0
2005	20	24	2	2	1	1
2006	20	21	2	2	0	0
2007	16	16	2	2	1	1
2008	16	17	1	1	1	1
2009	7	7	0	0	0	0
2010	8	8	1	1	1	1

*Note: The number of fatalities can be greater than the number of fatal collisions. For example, the number of fatal collisions during 2006 totaled 20, while the number of fatalities during that year was 21, indicating there was a multiple fatality collision.*

**Table 3.1.4**  
**Fatality Rate per 100,000 Population**

		All Collision Types		Pedestrian		Bicycle	
Year	Population	# of Fatalities	Fatalities per 100,000 populations	# of Fatalities	Fatalities per 100,000 populations	# of Fatalities	Fatalities per 100,000 populations
2002	351,675	14	3.98	1	0.28	0	0.00
2003	351,843	17	4.83	0	0.00	1	0.28
2004	356,795	25	7.01	2	0.56	0	0.00
2005	364,498	24	6.58	2	0.55	1	0.27
2006	367,000	21	5.72	2	0.54	0	0.00
2007	368,300	16	4.34	2	0.54	1	0.27
2008	341,150	17	4.98	1	0.29	1	0.29
2009	343,180	7	2.04	0	0.00	0	0.00
2010	284,100	8	2.82	1	0.35	1	0.35

**Table 3.1.5**  
**Fatal Collision Rate per 100,000 Population**

		All Collision Types		Pedestrian		Bicycle	
Year	Population	# of Fatal Collisions	Fatal Collisions per 100,000 Population	# of Fatal Collisions	Fatal Collisions per 100,000 Population	# of Fatal Collisions	Fatal Collisions per 100,000 Population
2002	351,675	13	3.69	1	0.28	0	0.00
2003	351,843	15	4.26	0	0.00	1	0.28
2004	356,795	21	5.88	2	0.56	0	0.00
2005	364,498	20	5.48	2	0.55	1	0.27
2006	367,000	20	5.44	2	0.54	0	0.00
2007	368,300	16	4.34	2	0.54	1	0.27
2008	341,150	16	4.69	1	0.29	1	0.29
2009	343,180	7	2.03	0	0.00	0	0.00
2010	284,100	8	2.81	1	0.35	1	0.35



**Table 3.1.6**  
**Fatality Rate per 100 Million Vehicle Miles Traveled**

<b>Year</b>	<b>Number of Fatalities</b>	<b>Maintained Road Miles</b>	<b>Annual 100 Million Miles Traveled</b>	<b>Fatality Rate</b>
2002	14	1,895	25	0.55
2003	17	1,883	27	0.64
2004	25	1,859	27	0.93
2005	24	1,856	26	0.91
2006	21	1,849	28	0.76
2007	16	1,855	30	0.54
2008	17	1,758	26	0.66
2009	7	1,743	23	0.30
2010	8	1,632	14	0.57

**Table 3.1.7**  
**Fatal Collision Rate per 100 Million Vehicle Miles Traveled**

<b>Year</b>	<b># of Fatal Collisions</b>	<b>Maintained Road Miles</b>	<b>Annual 100 Million Miles Traveled</b>	<b>Fatal Collision Rate</b>
2002	13	1,895	25	0.51
2003	15	1,883	27	0.56
2004	21	1,859	27	0.78
2005	20	1,856	26	0.76
2006	20	1,849	28	0.73
2007	16	1,855	30	0.54
2008	16	1,758	26	0.62
2009	7	1,743	23	0.30
2010	8	1,632	14	0.57

### 3.2 US, State, and Unincorporated King County Collision, Fatal Collision, and Fatality Rates

**Table 3.2.1**  
**US, State, and Unincorporated King County Collision Rate per 100,000 Population**

	Unincorporated King County			Washington State			United States		
Year	Population	Collisions	Collisions per 100,000 Population	Population	Collisions	Collisions per 100,000 Population	Population	Collisions	Collisions per 100,000 population
2002	351,675	2,618	744	6,056,000	12,6536	2,089	287,727,000	6,316,000	2,195
2003	351,843	2,753	782	6,110,000	12,1515	1,989	290,211,000	6,328,000	2,180
2004	356,795	2,736	767	6,180,000	12,5113	2,024	292,892,000	6,181,000	2,110
2005	364,498	2,896	795	6,255,000	13,4515	2,151	295,561,000	6,159,000	2,084
2006	367,000	2,883	786	6,361,000	13,2499	2,083	298,363,000	5,973,000	2,002
2007	368,300	2,655	721	6,450,000	12,8827	1,997	301,290,000	6,024,000	1,999
2008	341,150	2,357	691	6,549,000	11,9410	1,823	304,060,000	5,811,000	1,911
2009	343,180	2,130	621	6,668,200	10,2859	1,543	305,529,000	5,505,000	1,802
2010	284,100	1,741	613	6,724,500	10,1576	1,511	308,746,000	5,419,000	1,755

**Table 3.2.2**  
**US, State, and Unincorporated King County Fatal Collision and Fatality Rate per 100,000 Population**

	Unincorporated King County			Washington State			United States		
Year	Population	Fatal Collisions per 100,000 population	Fatalities per 100,000 population	Population	Fatal Collisions per 100,000 population	Fatalities per 100,000 population	Population	Fatal Collisions per 100,000 population	Fatalities per 100,000 population
2002	351,675	3.69	3.98	6,056,000	9.68	10.87	287,727,000	13.38	14.8
2003	351,843	4.26	4.83	6,110,000	8.82	9.82	290,211,000	13.26	14.95
2004	356,795	5.88	7.01	6,180,000	8.24	9.18	292,892,000	13.13	14.78
2005	364,498	5.48	6.58	6,255,000	9.27	10.38	295,561,000	13.28	14.63
2006	367,000	5.44	5.72	6,361,000	9.09	9.95	298,363,000	12.95	14.72
2007	368,300	4.34	4.34	6,450,000	8.23	8.85	301,290,000	12.42	14.31
2008	341,150	4.69	4.98	6,549,000	7.34	7.96	304,060,000	11.19	13.69
2009	343,180	2.03	2.04	6,668,200	7.34	7.96	305,529,000	10.08	11.09
2010	284,100	2.81	2.82	6,724,500	6.28	6.84	308,746,000	10.80	10.65

Source: Washington State Dept of Transportation and the National Highway Traffic Safety Administration

**Table 3.2.3**  
**US, State, and Unincorporated King County**  
**Collision Rate per Million Vehicle Miles Traveled (VMT)**

	Unincorporated King County			Washington State			United States		
Year	Millon VMT	Collisions	Collisions per Millon VMT	Million VMT	Collisions	Collisions per Million VMT	Million VMT	Collisions	Collisions per Million VMT
2002	2,529	2,618	1.04	54,833	126,536	2.31	2,856,000	6,316,000	2.21
2003	2,666	2,753	1.03	55,046	121,515	2.21	2,890,000	6,328,000	2.19
2004	2,676	2,736	1.02	55,784	125,113	2.24	2,965,000	6,181,000	2.08
2005	2,642	2,896	1.10	55,556	134,515	2.42	2,989,000	6,159,000	2.06
2006	2,758	2,883	1.05	56,696	132,499	2.34	3,014,000	5,973,000	1.98
2007	2,959	2,655	0.90	56,900	128,827	2.26	3,030,000	6,024,000	1.99
2008	2,588	2,357	0.91	55,213	119,410	2.16	2,926,000	5,811,000	1.99
2009	2,332	2,130	0.91	56,552	102,859	1.82	2,975,000	5,505,000	1.85
2010	1,416	1,741	1.23	57,190	101,576	1.78	2,985,000	Unavailable	Unavailable

**Table 3.2.4**  
**US, State, and Unincorporated King County Fatal Collision**  
**and Fatality Rates per 100 Million Vehicle Miles Traveled (VMT)**

	Unincorporated King County			Washington State			United States		
Year	100 Million VMT	Fatal Collision Rate per 100 Million VMT	Fatality Rate per 100 Million VMT	100 Million VMT	Fatal Collision Rate per 100 Million VMT	Fatality Rate per 100 Million VMT	100 Million VMT	Fatal Collision Rate per 100 Million VMT	Fatality Rate per 100 Million VMT
2002	25	0.51	0.55	548	1.20	1.20	28,560	1.35	1.51
2003	27	0.56	0.64	550	1.09	1.09	28,900	1.33	1.48
2004	27	0.78	0.93	558	0.92	1.02	29,650	1.30	1.44
2005	26	0.76	0.91	556	1.04	1.17	29,890	1.31	1.46
2006	28	0.73	0.76	567	1.02	1.12	30,140	1.28	1.42
2007	30	0.54	0.54	569	0.93	1.00	30,300	1.24	1.36
2008	26	0.62	0.66	552	0.87	0.94	29,260	1.16	1.27
2009	23	0.30	0.30	566	0.80	0.87	29,750	1.04	1.14
2010	14	0.57	0.57	572	0.74	0.80	29,850	1.02	1.10

Source: Washington State Dept of Transportation and the National Highway Traffic Safety Administration

### 3.3 Urban versus Rural Roads - Fatal Collision and Fatality Rates

**Table 3.3.1**  
**Urban versus Rural Roads in Unincorporated King County**  
**Fatal Collision and Fatality Rate per 100,000 Population**

Year	Rural Roads in Unincorporated King County					Urban Roads in Unincorporated King County				
	Population	Fatal Collisions	Fatalities	Fatal Collisions per 100,000 population	Fatalities per 100,000 population	Population	Fatal Collisions	Fatalities	Fatal Collisions per 100,000 population	Fatalities per 100,000 population
2002	135,000	7	7	5.19	5.19	215,000	6	7	2.79	3.26
2003	135,000	7	9	5.19	6.67	215,000	8	8	3.72	3.72
2004	137,000	11	13	8.03	9.49	219,795	10	12	4.55	5.46
2005	144,498	9	13	6.23	9.00	220,000	11	11	5.00	5.00
2006	142,000	9	9	6.34	6.34	225,000	11	12	4.89	5.33
2007	142,000	5	5	3.52	3.52	226,300	11	11	4.86	4.86
2008	144,000	9	10	6.25	6.94	197,150	7	7	3.55	3.55
2009	124,400	1	1	0.81	0.81	218,780	6	6	2.74	2.74
2010	123,600	3	3	2.43	2.43	201,400	5	5	2.48	2.48

**Table 3.3.2**  
**Urban versus Rural Roads in Unincorporated King County**  
**Fatal Collision Rate per 100 Million Vehicle Miles Traveled**

	Fatal Collisions			Maintained Road Miles			Annual 100 Million Miles Driven			Fatal Collision Rate per 100 Million Miles Travelled		
Year	Total	Rural	Urban	Total	Rural*	Urban	Total	Rural	Urban**	Total	Rural	Urban
2002	13	7	6	1,895	1,034	860	25.3	9.7	15.6	0.51	0.72	0.38
2003	15	7	8	1,883	707	1,177	26.7	5.1	21.5	0.56	1.37	0.37
2004	21	11	10	1,859	680	1,180	26.8	4.9	21.8	0.78	2.24	0.46
2005	20	9	11	1,856	678	1,177	26.4	5.0	21.5	0.76	1.82	0.51
2006	20	9	11	1,849	678	1,171	27.6	5.0	22.6	0.73	1.79	0.49
2007	16	5	11	1,855	677	1,178	29.6	5.4	24.2	0.54	0.92	0.45
2008	16	9	7	1,758	676	1,082	25.9	4.9	21.0	0.62	1.83	0.33
2009	7	1	6	1,743	668	1,075	23.3	4.3	19.0	0.30	0.23	0.32
2010	8	3	5	1,632	664	968	14.2	3.2	11.0	0.57	0.94	0.45

**Table 3.3.3**  
**Urban versus Rural Roads in Unincorporated King County**  
**Fatality Rate per 100 Million Vehicle Miles Traveled**

	Fatalities			Maintained Road Miles			Annual 100 Million VMT			Fatalities per 100 Million VMT		
Year	Total	Rural	Urban	Total	Rural*	Urban	Total	Rural	Urban**	Total	Rural	Urban
2002	14	7	7	1,895	1,034	860	25.3	9.7	15.6	0.55	0.72	0.45
2003	17	9	8	1,883	707	1,177	26.7	5.1	21.5	0.64	1.76	0.37
2004	25	13	12	1,859	680	1,180	26.8	4.9	21.8	0.93	2.65	0.55
2005	24	13	11	1,856	678	1,177	26.4	5.0	21.5	0.91	2.62	0.51
2006	21	9	12	1,849	678	1,171	27.6	5.0	22.6	0.76	1.80	0.53
2007	16	5	11	1,855	677	1,178	29.6	5.4	24.2	0.54	0.93	0.45
2008	17	10	7	1,758	676	1,082	25.9	4.9	21.0	0.66	2.04	0.33
2009	7	1	6	1,743	668	1,075	23.3	4.3	19.0	0.30	0.23	0.32
2010	8	3	5	1,632	664	968	14.2	3.2	11.0	0.57	0.94	0.45

\*Assumes 28% rural road miles for 2006

\*\* Assumes Urban 100 Million miles traveled equals total road miles minus rural classified road miles.

**Table 3.3.4**  
**Urban versus Rural Collision Rate**  
**per Million Vehicle Miles Traveled (VMT)**

	Number of Collisions			Maintained Road Miles			Annual Million VMT			Collisions per Million VMT		
Year	Total	Rural	Urban	Total	Rural*	Urban	Total	Rural	Urban**	Total	Rural	Urban
2002	2,618	247	1,400	1,895	1,034	860	2,529	973	1,559	1.04	0.25	0.90
2003	2,753	482	2,104	1,883	707	1,177	2,666	510	2,154	1.03	0.95	0.98
2004	2,736	494	2,118	1,859	680	1,180	2,676	490	2,184	1.02	1.01	0.97
2005	2,896	497	2,250	1,856	678	1,177	2,642	495	2,152	1.10	1.00	1.05
2006	2,883	447	2,297	1,849	678	1,171	2,758	504	2,260	1.05	0.89	1.02
2007	2,655	403	2,136	1,855	677	1,178	2,959	541	2,421	0.90	0.74	0.88
2008	2,357	430	1,798	1,758	676	1,082	2,588	491	2,103	0.91	0.88	0.86
2009	2,130	393	1,604	1,743	668	1,075	2,332	431	1,900	0.91	0.91	0.84
2010	1,741	330	1,411	1,632	664	968	1,416	318	1,098	1.23	1.04	1.29

\*Assumes 28% Rural road miles for 2006

\*\*Assumes Urban 100 Million miles traveled equals total road miles minus rural classified road miles (urban = all - rural).

### 3.4 Collisions By Road Classification

**Table 3.4.1**  
**Collisions by Road Classification**

Year	Principal Arterial	Minor Arterial	Collector	Local Access	Not located By County	Total
2003	607	594	659	726	167	2,753
2004	669	606	634	703	124	2,736
2005	653	592	682	820	149	2,896
2006	629	600	674	841	139	2,883
2007	541	526	624	848	116	2,655
2008	492	499	525	711	130	2,357
2009	419	438	499	641	133	2,130
2010	453	457	385	446	0	1,741

*Note: "Not Located by County" column displays the number of collisions that were not given location designations due to unforeseen circumstances.*

**Table 3.4.2**  
**Fatal Collisions by Road Classification**

<b>Year</b>	<b>Principal Arterial</b>	<b>Minor Arterial</b>	<b>Collector</b>	<b>Local Access</b>
2002	0	5	6	2
2003	2	4	7	2
2004	4	3	10	4
2005	5	3	10	2
2006	5	4	9	2
2007	4	3	2	7
2008	1	6	6	3
2009	0	2	3	2
2010	2	3	2	1

**Table 3.4.3**  
**Injury Collisions by Road Classification**

<b>Year</b>	<b>Principal Arterial</b>	<b>Minor Arterial</b>	<b>Collector</b>	<b>Local Access</b>	<b>Not Located By County</b>
2002	116	90	65	70	756
2003	239	241	277	216	86
2004	266	255	243	201	49
2005	274	234	268	240	58
2006	258	251	275	261	58
2007	197	204	248	248	40
2008	175	190	196	210	49
2009	157	176	169	195	41
2010	167	174	151	108	0

Note: "Not Located by County" column displays the number of collisions that were not given location designations due to unforeseen circumstances.



**Table 3.4.4**  
**Property Damage Only Collisions**  
**By Road Classification**

<b>Year</b>	<b>Principal Arterial</b>	<b>Minor Arterial</b>	<b>Collector</b>	<b>Local Access</b>	<b>Not Located By County</b>
2002	281	271	297	444	215
2003	366	349	375	508	81
2004	399	348	381	498	75
2005	374	355	405	578	90
2006	366	345	390	578	81
2007	340	319	374	593	76
2008	316	303	323	498	81
2009	262	260	327	444	92
2010	284	280	232	337	0

## 4.0 COLLISION TYPES

### 4.1 Collision Severity

Table 4.1.1 summarizes the number of collisions occurring annually over the past 9 years. The collisions are displayed by severity: property damage only (PDO); injury; and fatal collisions. The number of fatalities can be higher than the number of fatal collisions because there can be multiple fatalities in a single collision.

**Table 4.1.1**  
**Collisions by Most Severe Injury**

Year	Fatal	Percent	Injury	Percent	Property Damage Only	Percent	Total
2002	13	0.5%	1097	42%	1508	58%	2618
2003	15	0.5%	1059	38%	1679	61%	2753
2004	21	0.8%	1014	37%	1701	62%	2736
2005	20	0.7%	1074	37%	1802	62%	2896
2006	20	0.7%	1103	38%	1760	61%	2883
2007	16	0.6%	937	35%	1702	64%	2655
2008	16	0.7%	820	35%	1521	65%	2357
2009	7	0.3%	738	35%	1385	65%	2130
2010	8	0.5%	600	34%	1133	65%	1741

**Table 4.1.2**  
**Fatal Collisions vs. Fatalities**

	All Collision Types	
Year	Fatal Collisions	Fatalities
2002	13	14
2003	15	17
2004	21	25
2005	20	24
2006	20	21
2007	16	16
2008	16	17
2009	7	7
2010	8	8

**Table 4.1.3**  
**Collisions by Collision Type**

<b>Collision Type</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Fixed object	687	664	715	731	678	614	606	563
Rear - end	604	644	628	649	582	524	453	382
Entering at angle	397	373	425	428	374	306	276	204
*Parked Hit Parked Car	220	206	267	234	233	217	200	135
Left turn	189	161	165	168	155	134	111	96
Vehicle overturned	75	89	93	87	98	69	90	61
Other	95	137	131	134	112	93	77	53
Sideswipe	122	125	135	129	119	114	75	51
Head on	50	40	50	41	40	35	34	24
Pedestrian	33	30	39	33	41	36	32	28
Bicycle	23	28	27	26	24	26	17	24
Right Turn	18	17	12	18	9	11	14	15
Animal	15	18	20	18	16	20	16	10
Driveway Entering	106	92	81	81	80	62	40	23
Driveway Exiting	119	112	108	106	94	96	81	58
Leaving /Entering Parked Position	NA	NA	NA	NA	NA	NA	7	14

*\*The "Parked" collision type for years 2002 through 2008 includes "One parked-one moving," "One car leaving parked position" and "One car entering parked position." The 2009 and 2010 data separates these data types into "Hit Parked Car" and "Leaving/Entering Parked Position."*

**Table 4.1.4  
Fatalities By Collision Type**

<b>Collision Type</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Fixed Object	12	11	9	10	5	8	5	2
Vehicle Overturned	0	2	3	1	2	2	1	0
Other	0	3	3	3	0	0	1	0
Entering at Angle	1	1	1	0	0	2	0	0
Head On	1	3	5	0	3	1	0	1
Pedestrian	0	2	1	2	2	1	0	1
Bicycle	1	0	1	0	1	1	0	1
Animal	0	0	0	0	0	1	0	0
Driveway Leaving	0	0	0	1	0	1	0	0
Driveway Entering	0	0	0	0	2	0	0	0
Parked	0	0	0	0	1	0	0	0
Left Turn	2	0	1	1	0	0	0	2
Rear End	0	1	0	2	0	0	0	1
Right Turn	0	0	0	0	0	0	0	0
Sideswipe	0	2	0	1	0	0	0	0
<b>Total:</b>	<b>17</b>	<b>25</b>	<b>24</b>	<b>21</b>	<b>16</b>	<b>17</b>	<b>7</b>	<b>8</b>

*\*Vehicle overturned includes motorcycle collisions. \*\* Run-off Road collisions include both collisions involving fixed objects struck and overturned collisions.*

*Note: This table summarizes the total number of fatalities, not the number of fatal collisions.*

**Table 4.1.5**  
**Fixed Object Fatalities**  
**By Vehicle Type**

VEHICLE 1 TYPE	2003	2004	2005	2006	2007	2008	2009	2010
Passenger Car	8	8	4	3	1	5	2	1
Pickup, Panel Truck or Vanette under 10,000 lb	1	3	3	2	2	2	2	1
Motorcycle	3	0	1	3	1	1	1	0
Other (ATV, Snowmobile, Dune Buggy, etc)	0	0	0	0	1	0	0	0
Truck (Flatbed, Van, etc)	0	0	1	2	0	0	0	0
<b>Total:</b>	<b>12</b>	<b>11</b>	<b>9</b>	<b>10</b>	<b>5</b>	<b>8</b>	<b>5</b>	<b>2</b>

**Table 4.1.6**  
**Fatalities Involving Overturned Vehicles**  
**By Vehicle Type**

VEHICLE 1 TYPE	2003	2004	2005	2006	2007	2008	2009	2010
Passenger Car	0	1	0	0	0	1	1	0
Pickup, Panel Truck or Vanette under 10,000 lb	0	1	2	0	0	0	0	0
Motorcycle	0	0	1	1	1	1	0	0
Other (ATV, Snowmobile, Dune Buggy, etc)	0	0	0	0	1	0	0	0
Truck (Flatbed, Van, etc)	0	0	0	0	0	0	0	0
<b>Total:</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>

**Table 4.1.7**  
**2010 Collisions**  
**Collision Type by Severity**

<b>Collision Type</b>	<b>Fatal</b>	<b>Injury</b>	<b>Property Damage Only</b>	<b>Total</b>
Fixed Object	2	154	372	528
Other Object	0	9	26	35
Rear End	1	153	228	382
Entering at Angle	0	65	139	204
Hit Parked Car	0	16	119	135
Left Turn	2	37	57	96
Vehicle Overturned	0	31	30	61
Other	0	16	37	53
Sideswipe	0	11	40	51
Pedestrian	1	27	0	28
Head On	1	15	8	24
Bicycle	1	23	0	24
Right Turn	0	4	11	15
Animal	0	2	8	10
Driveway Entering	0	8	15	23
Driveway Exiting	0	19	39	58
Leaving/Entering Parked Position	0	10	4	14
<b>Total:</b>	<b>8</b>	<b>600</b>	<b>1133</b>	<b>1741</b>

**Table 4.1.8**  
**2010 Collisions By First Object Struck And Severity**

<b>FIRST OBJECT STRUCK</b>	<b>Fatal</b>	<b>Injury</b>	<b>PDO</b>	<b>Total</b>
Tree or Stump (stationary)	0	34	39	<b>73</b>
Utility Pole	0	28	38	<b>66</b>
Fence	0	11	49	<b>60</b>
Retaining Wall (concrete, rock, brick, etc.)	0	0	6	<b>6</b>
Over Embankment - No Guardrail Present	0	7	12	<b>19</b>
Roadway Ditch	0	22	60	<b>82</b>
Earth Bank or Ledge	0	10	14	<b>24</b>
Guardrail - Face	0	9	25	<b>34</b>
Wood Sign Post	0	10	26	<b>36</b>
Culvert and/or other Appurtenance in Ditch	0	2	2	<b>4</b>
Miscellaneous Object or Debris on Road	0	1	3	<b>4</b>
Guardrail - Leading End	0	0	4	<b>4</b>
Mailbox	0	7	25	<b>32</b>
Utility Box	0	0	7	<b>7</b>
Curb, Raised Traffic Island or Raised Median Curb	1	2	9	<b>12</b>
Guardrail - Through, Over or Under	0	2	1	<b>3</b>
Guide Post	0	0	1	<b>1</b>
Manhole Cover	0	0	1	<b>1</b>
Fallen tree hit by vehicle (on the road)	0	1	2	<b>3</b>
Concrete Barrier/Jersey Barrier - Face	0	1	2	<b>3</b>
Building	0	1	1	<b>2</b>
Fire Hydrant	1	1	14	<b>16</b>
Other Objects	0	8	31	<b>39</b>
Rock Bank or Ledge	0	0	1	<b>1</b>
Bridge Rail - Face	0	2	0	<b>2</b>
Signal Post	0	0	1	<b>1</b>
Metal Sign Post	0	2	1	<b>3</b>
Temporary Traffic Sign or Barricade	0	0	3	<b>3</b>
Not Stated	0	0	2	<b>2</b>
Underside of Bridge	0	0	6	<b>6</b>
Boulder (stationary)	0	0	9	<b>9</b>
Street Light Pole or Base	0	2	3	<b>5</b>
<b>Total</b>	<b>2</b>	<b>163</b>	<b>398</b>	<b>563</b>

## 4.2 Fixed Object Collisions

**Table 4.2.1**  
**Collision Rate per Million Vehicle Miles Traveled (VMT) for Collisions Involving Fixed Objects**

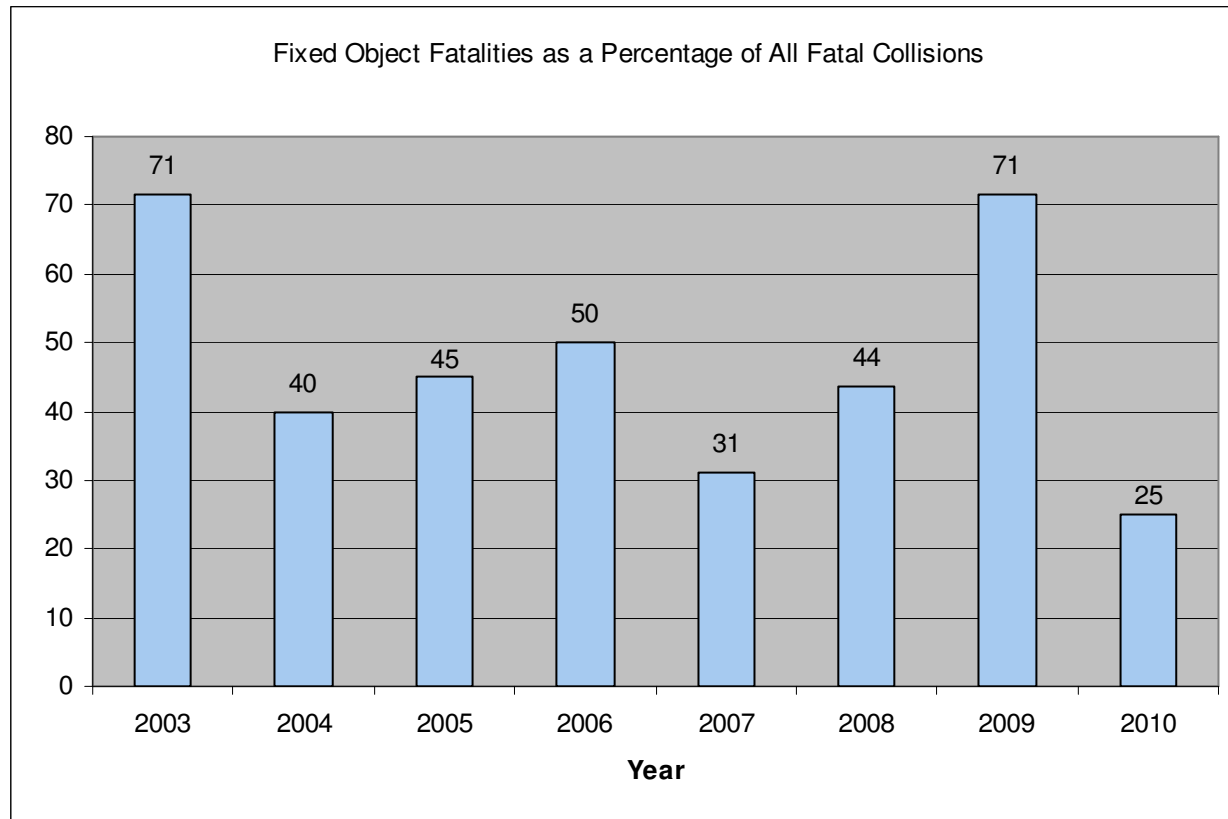
	Fixed Object Collisions			Average Daily Traffic Volumes			Maintained Road Miles			Annual Million VMT			Fixed Object Collisions per Million VMT		
Year	Total	Rural	Urban	Total	Rural	Urban	Total	Rural*	Urban	Total	Rural	Urban	Total	Rural	Urban
2005	715	255	442	5969	3291	8648	1,856	678	1,177	2,642	495	2,152	0.27	0.51	0.21
2006	731	209	509	6244	3373	9114	1,849	678	1,171	2,758	504	2,260	0.27	0.41	0.23
2007	678	197	470	6603	3564	9642	1,855	677	1,178	2,959	541	2,421	0.23	0.36	0.19
2008	614	222	380	6230	3204	9257	1,758	676	1,082	2,588	491	2,103	0.24	0.45	0.18
2009	606	192	385	6164	6310	5969	1,743	668	1,075	2,332	431	1,900	0.26	0.45	0.20
2010	563	167	396	2362	1312	3107	1,632	664	968	1,416	318	1,098	0.40	0.53	0.36

**Table 4.2.2**  
**Percentage of Collisions Involving Fixed Objects to Total Number of Collisions**

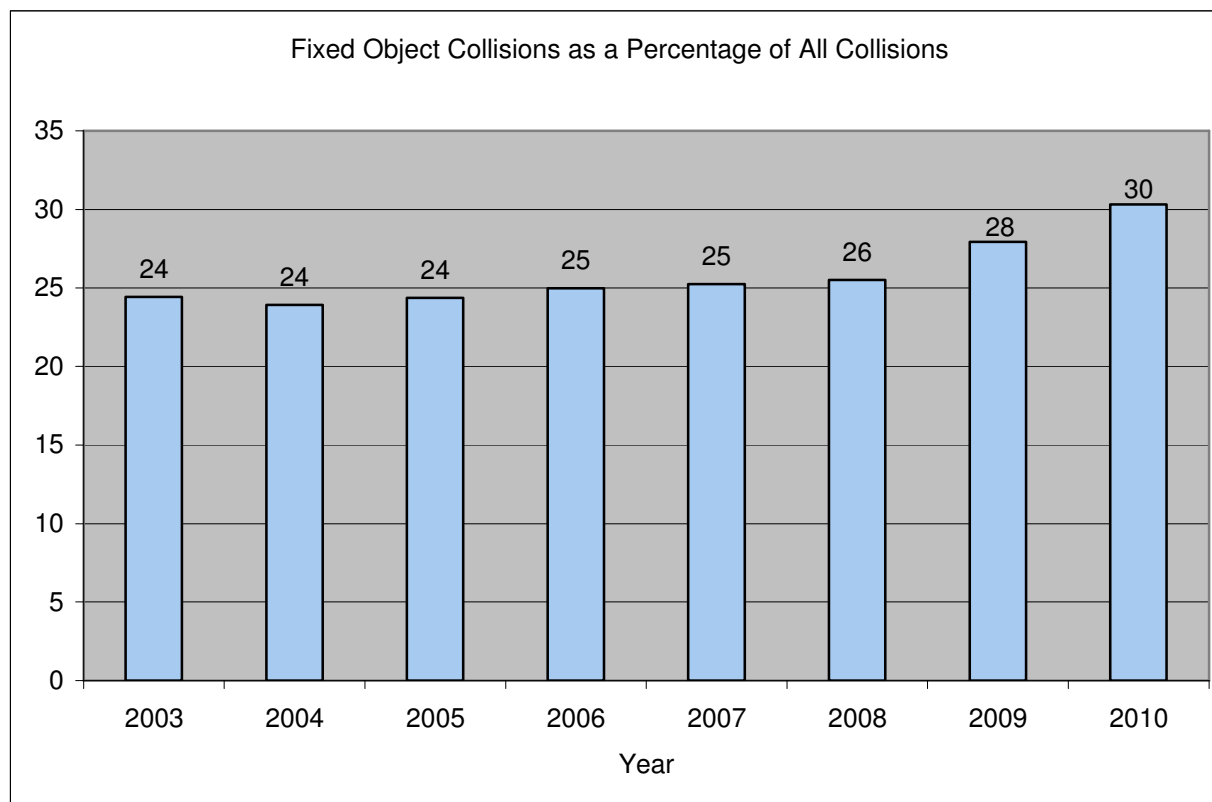
	Fatal Collisions			Collisions		
Year	Total	Fixed object	%	Total	Fixed object	%
2003	15	11	73%	2753	687	25%
2004	21	9	43%	2736	664	24%
2005	20	9	45%	2896	715	25%
2006	20	10	50%	2883	731	25%
2007	16	5	31%	2655	678	26%
2008	16	7	44%	2357	614	26%
2009	7	5	71%	2130	606	28%
2010	8	2	25%	1741	563	32%



**Figure 4.2.1**  
**Fatality Collisions Involving Fixed Objects as a**  
**Percentage of All Fatality Collisions**



**Figure 4.2.2**  
**Collisions Involving Fixed Objects as a**  
**Percentage of Total Collisions**



**Table 4.2.3**  
**2010 Collisions By Object Struck**

<b>First Object Struck</b>	<b>2010</b>
Tree or Stump (stationary)	73
Utility Pole	66
Fence	60
Roadway Ditch	82
Guardrail - Face	34
Earth Bank or Ledge	24
Wood Sign Post	35
Mailbox	32
Retaining Wall (concrete, rock, brick, etc.)	6
Other Objects	132
Over Embankment - No Guardrail Present	19
<b>Total:</b>	<b>563</b>

**Table 4.2.4**  
**2010 Fatal Collisions Involving Fixed Objects**  
**By Urban and Rural Designated Roadways**

<b>First Object Struck</b>	<b>Rural</b>	<b>Urban</b>
Curb, Raised Traffic Island or Raised Median Curb	0	1
Fire Hydrant	1	0
<b>Total:</b>	<b>1</b>	<b>1</b>

**Table 4.2.5**  
**Fatal Collisions Involving Guardrail**  
**By Contributing Circumstance**

Contributing Circumstances	2003	2004	2005	2006	2007	2008	2009	2010
Exceeding Reasonable Safe Speed and/or Exceeding Speed Limit and Under the Influence of Alcohol	2	0	1	1	0	0	0	0
Other	1	0	0	0	1	1	0	0
<b>Total:</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>

### 4.3 Pedestrian Collisions

**Table 4.3.1**  
**Pedestrian Collisions by Severity**

	Collision Severity			
Year	Fatal	Injury	Property Damage Only	Total Collisions
2003	0	39	0	39
2004	1	32	1	35
2005	1	39	0	40
2006	2	34	0	36
2007	2	41	0	43
2008	1	37	1	39
2009	0	35	0	35
2010	1	27	0	28

**Table 4.3.2**  
**Facility used and Severity for**  
**2010 Pedestrian Collisions**

Facility	No Injury	Injury	Fatality	Total
Roadway	0	11	1	12
Shoulder	0	2	0	2
Marked X walk	0	8	0	8
Sidewalk	0	1	0	1
Unmarked X walk	0	5	0	5
<b>Total:</b>	<b>0</b>	<b>27</b>	<b>1</b>	<b>28</b>

**Table 4.3.3**  
**Total Number of Pedestrians**  
**Involved in Collisions**

<b>Year</b>	<b># of Pedestrians Involved in Collisions</b>
2003	40
2004	41
2005	42
2006	39
2007	44
2008	48
2009	35
2010	29

*Note: The total number of pedestrians involved in a collision can be greater than the total number of pedestrian collisions because there can be more than one pedestrian involved in a collision.*

**Table 4.3.4**  
**Pedestrian Collisions by Contributing Circumstance**

<b>Contributing Circumstance</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Fail to Yield Row to Pedestrian	13	10	10	16	12	15	12	12
Other	1	5	5	2	6	5	8	6
None	9	6	17	7	16	8	5	9
Exceeding Reasonable Safe Speed	2	1	1	1	1	1	3	1
Inattention	5	4	3	1	1	0	3	0
Driver Distractions Outside Vehicle	0	0	0	0	0	0	2	0
Disregard Flagger - Officer	0	0	1	0	0	0	1	0
Under Influence of Drugs	2	0	0	0	0	0	1	0
Contributing Circumstance was not filled in	0	2	1	0	1	0	0	0
Apparently Asleep	0	1	0	0	0	0	0	0
Apparently Ill	0	0	0	0	1	1	0	0
Did Not Grant RW to Vehicle	0	1	0	0	0	1	0	0
Disregard Stop and Go Light	0	1	1	1	0	0	0	0
Disregard Stop Sign - Flashing Red	1	0	0	1	0	0	0	0
Driver Interacting with Passengers, Animal	0	0	0	0	1	0	0	0
Driver Smoking	0	0	0	0	1	0	0	0
Exceeding Stated Speed Limit	0	1	0	2	0	1	0	0
Improper Backing	0	0	0	1	0	1	0	0
Improper Passing	0	1	0	1	0	0	0	0
Improper Turn	0	0	1	0	1	0	0	0
Operating Defective Equipment	2	0	0	0	0	2	0	0
Other Driver Distractions Inside Vehicle	0	0	0	0	0	2	0	0
Under Influence of Alcohol	4	2	1	2	1	2	0	0
Unknown Driver Distraction	0	0	0	1	1	0	0	0

**Table 4.3.5**  
**Age of Pedestrians Involved in Collisions**

Age Range		Total Pedestrians 2003-2010
0	0	1
1	5	12
6	10	8
11	15	47
16	20	38
21	25	26
26	30	22
31	35	19
36	40	20
41	45	22
46	50	15
51	55	18
56	60	14
61	65	12
66	70	5
71	75	12
76	80	2
81	85	1
	>85	1

**Table 4.3.6**  
**Gender of Pedestrians Involved in Collisions**

Year	Female	Male
2003	20	14
2004	9	20
2005	12	21
2006	10	19
2007	17	16
2008	24	24
2009	10	22
2010	10	18



## 4.4 Bicycle Collisions

**Table 4.4.1**  
**Bicycle Collisions**

<b>Year</b>	<b>Number of Bicycle Collisions</b>
2003	23
2004	28
2005	27
2006	26
2007	24
2008	26
2009	17
2010	24

**Table 4.4.2**  
**Number of Bicyclists Involved in Collisions**

<b>Year</b>	<b>Number of Bicyclists Involved in Collisions</b>
2003	24
2004	28
2005	27
2006	26
2007	28
2008	26
2009	18
2010	24

**Table 4.4.3**  
**Bicycle Collisions**  
**By Severity**

<b>Year</b>	<b>Dead at Scene</b>	<b>Died in Hospital</b>	<b>Evident Injury</b>	<b>No Injury</b>	<b>Possible Injury</b>	<b>Serious Injury</b>
2003	0	1	10	0	6	6
2004	0	0	13	1	13	1
2005	0	1	11	1	8	6
2006	0	0	11	2	10	3
2007	0	1	13	2	6	2
2008	1	0	14	0	9	2
2009	0	0	13	1	3	0
2010	1	0	10	0	9	4
<b>Total</b>	<b>2</b>	<b>3</b>	<b>95</b>	<b>7</b>	<b>64</b>	<b>24</b>

## 4.5 Motorcycle Involved Collisions

**Table 4.5.1**  
**Motorcycle Collisions**

Year	Number of Motorcycle Collisions
2003	47
2004	53
2005	60
2006	73
2007	49
2008	41
2009	50
2010	45

*Note: This table displays collisions that were coded as a motorcycle collision type*

**Table 4.5.2**  
**Total Number of Motorcycles**  
**Involved in All Collisions**

Year	Number of Motorcycles
2003	60
2004	72
2005	80
2006	104
2007	63
2008	55
2009	63
2010	62

**Table 4.5.3**  
**Motorcycle Involved Collisions**  
**By Severity**

<b>Year</b>	<b>Dead at Scene</b>	<b>Died in Hospital</b>	<b>Evident Injury</b>	<b>No Injury</b>	<b>Possible Injury</b>	<b>Serious Injury</b>	<b>Unknown</b>
2003	2	2	25	6	9	22	1
2004	2	1	26	13	13	14	0
2005	4	0	34	7	23	20	0
2006	3	3	36	11	16	23	0
2007	1	1	25	8	18	14	0
2008	3	0	23	10	12	17	1
2009	1	0	25	5	19	15	2
2010	2	0	19	11	9	10	0

## 5.0 OTHER COLLISION INFORMATION

### 5.1 Estimated Economic Costs

Table 5.1.1 shows the estimated annual cost of collisions, as indicated; the estimated cost of collisions during 2010 was \$53.8 million<sup>1</sup>.

**Table 5.1.1**  
**Estimated Economic Costs**

Severity	2010 Collisions	Estimated Cost
Property Damage Only	1133	\$6,798,000
Injury	600	\$39,000,000
Fatal	8	\$8,000,000
<b>Total</b>	<b>1741</b>	<b>\$53,798,000</b>

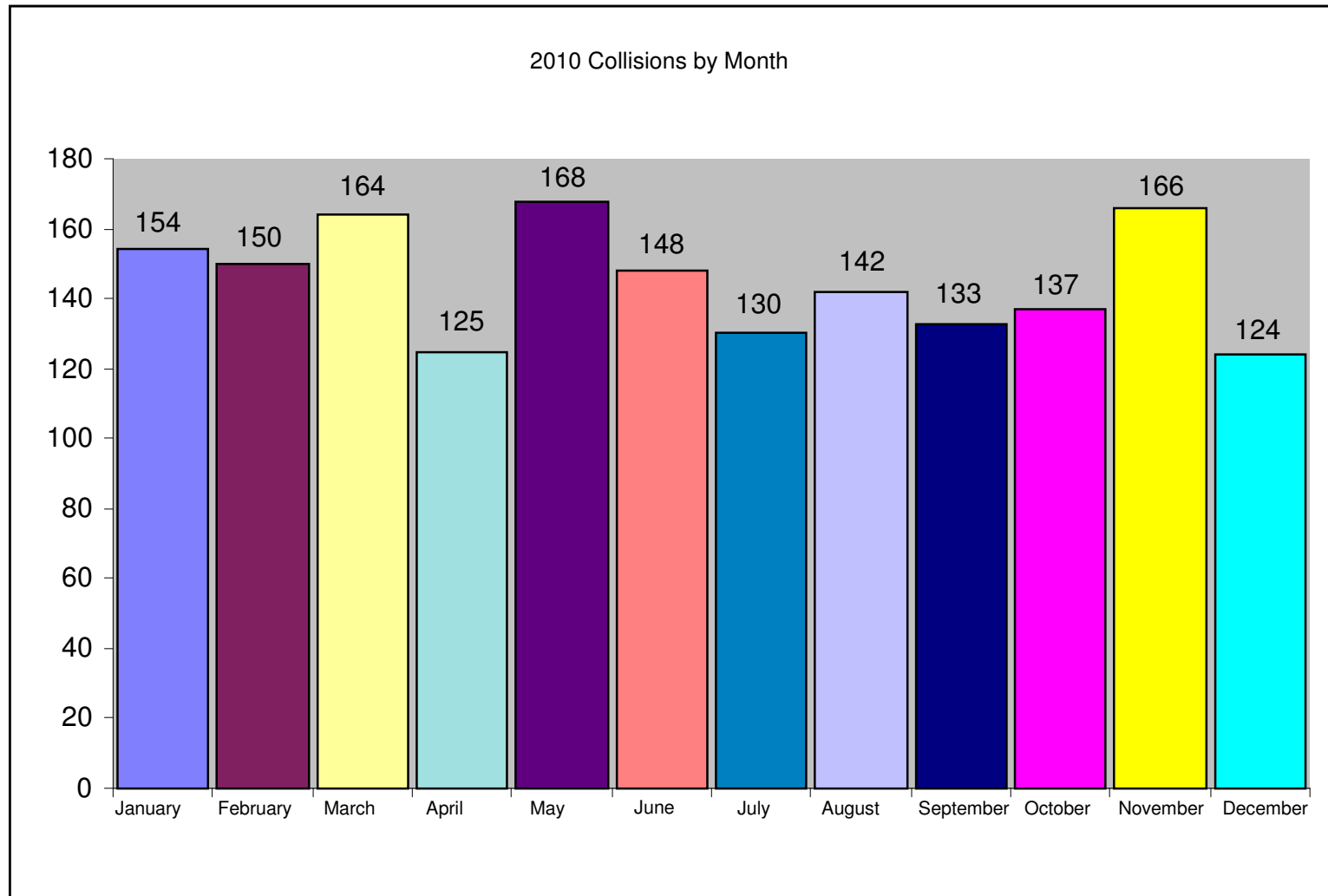
*Note: Data is not normalized to account for external factors. Normalized data is used when comparing collisions over time.*

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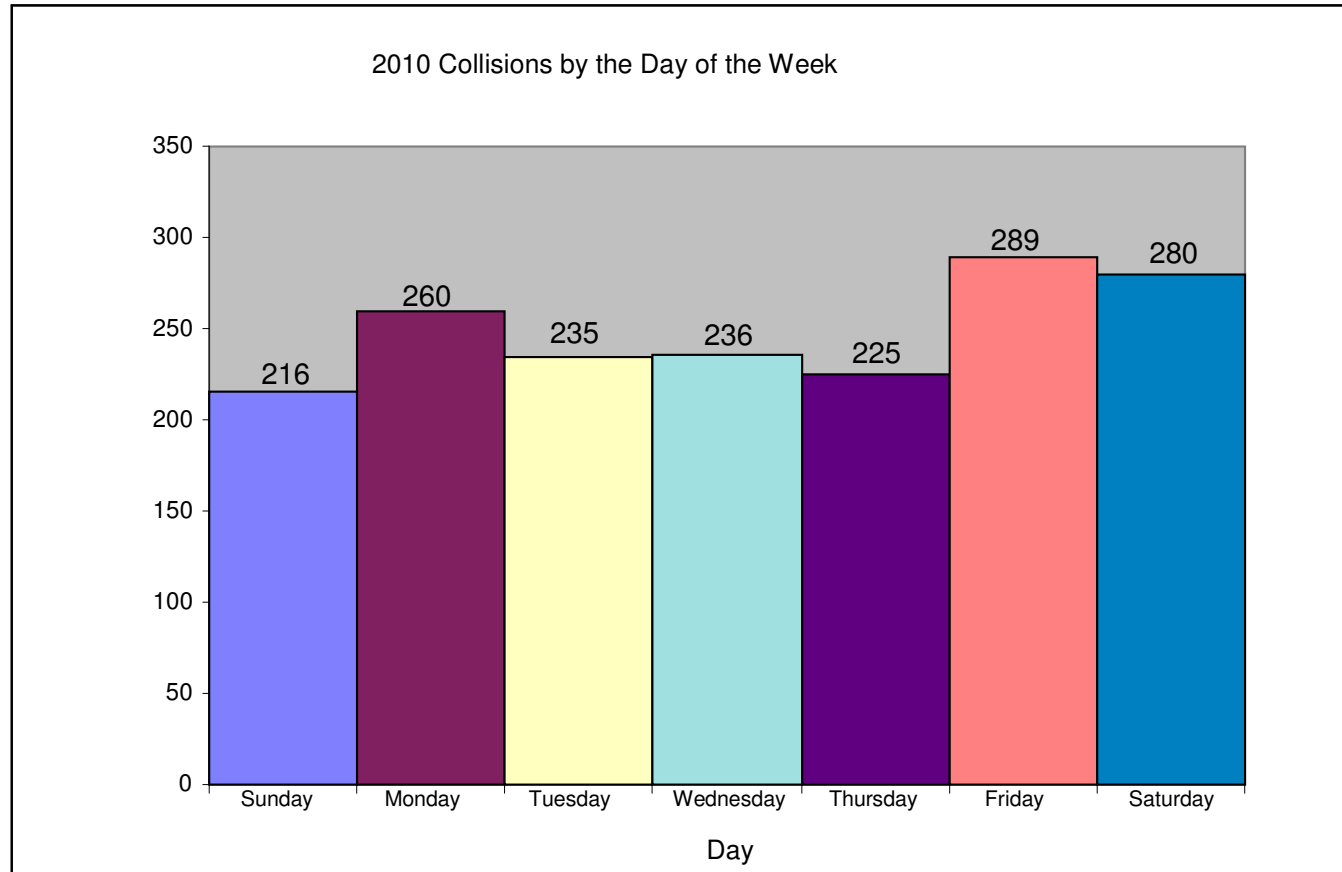
<sup>1</sup> The following estimated costs per accident are used in this calculation: Property Damage Only-\$6,000, Injury-\$65,000, Fatality-\$1,000,000  
*2010 Collision Data Report*

## 5.2 Month, Day of Week, and Time of Day

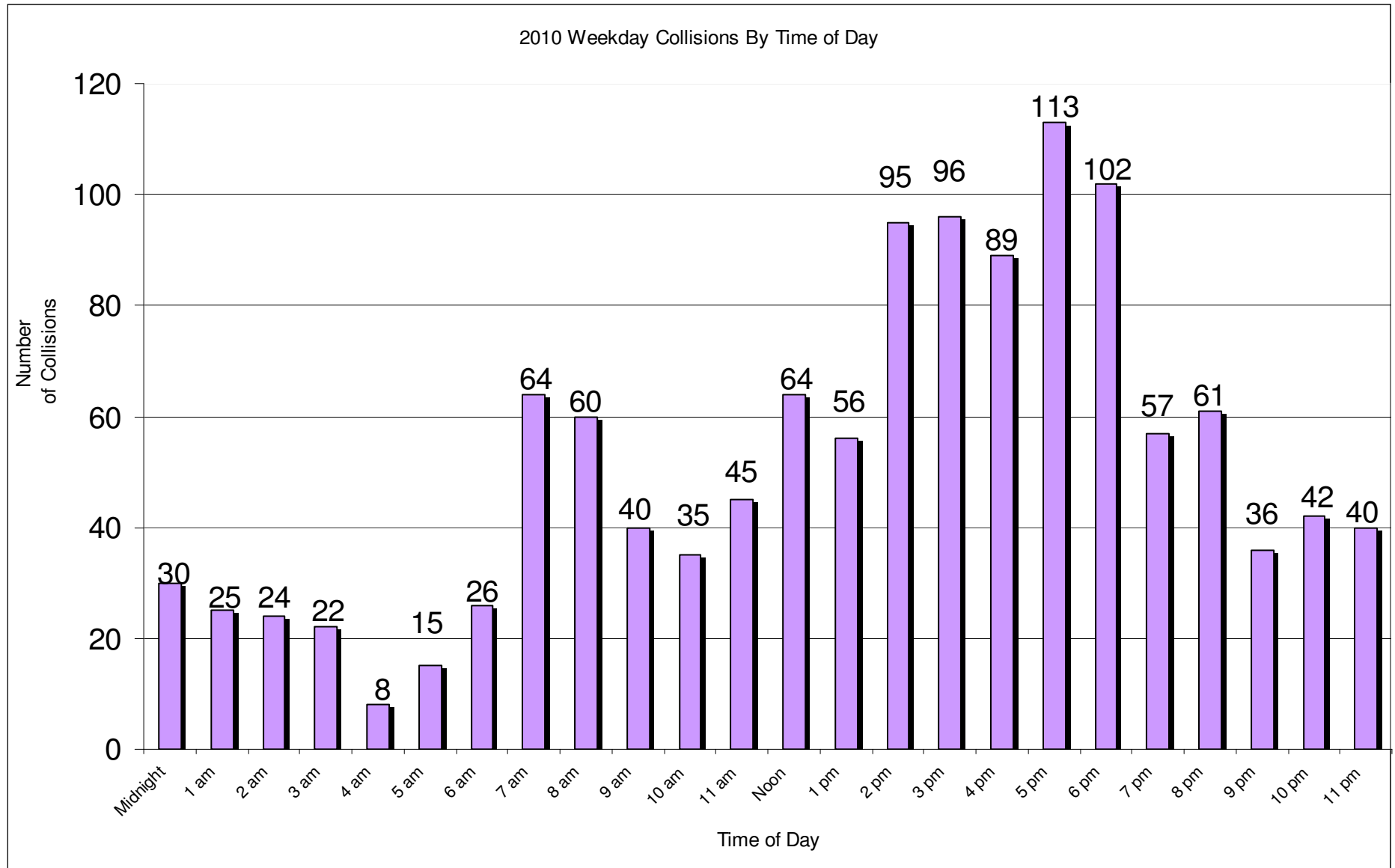
**Figure 5.2.1**  
**2010 Collisions by Month**



**Figure 5.2.2**  
**2010 Collisions By Day of Week**

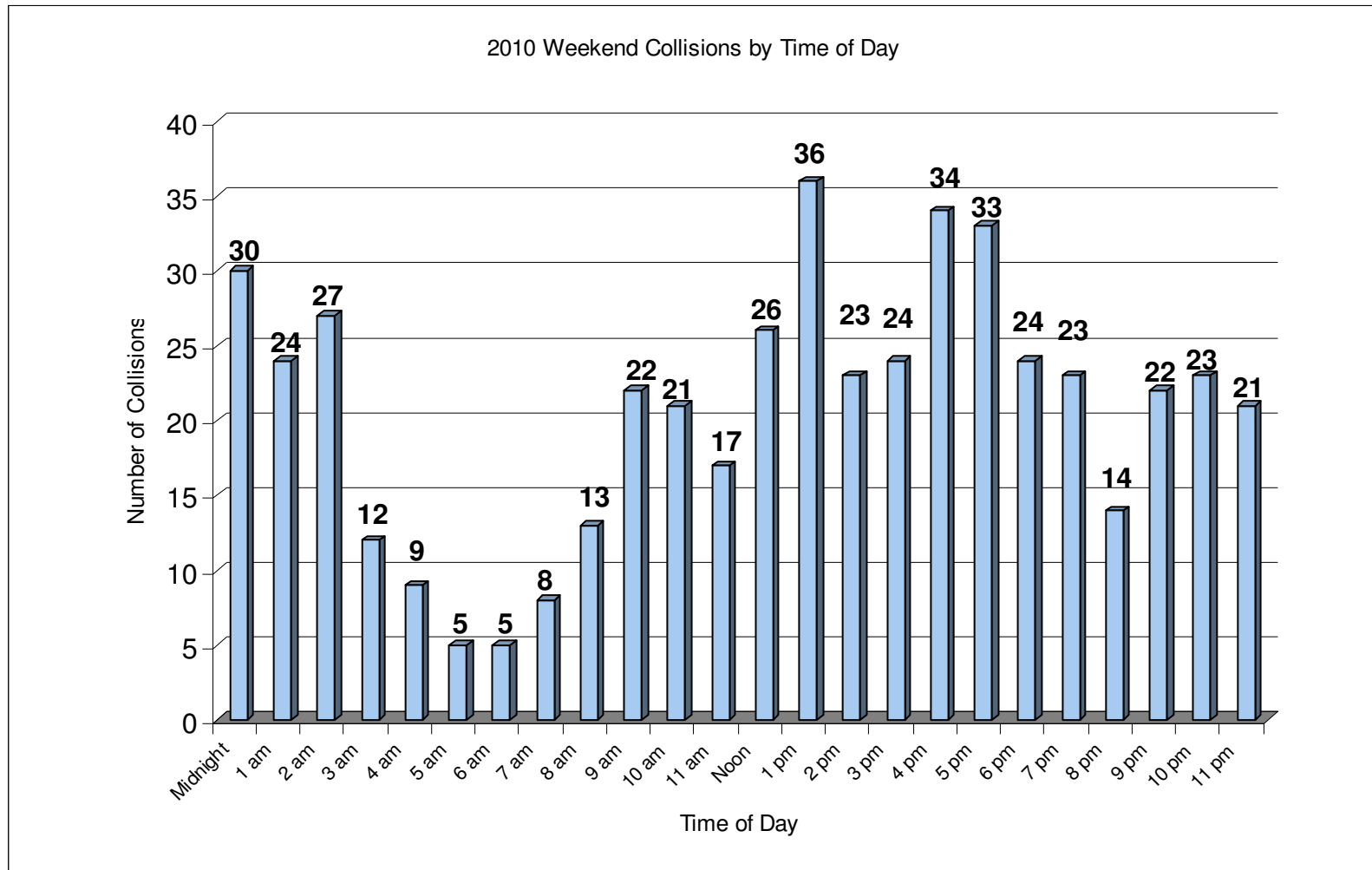


**Figure 5.2.3**  
**2010 Weekday Collisions**  
**By Time of Day**





**Figure 5.2.4**  
**2010 Weekend Collisions**  
**By Time of Day**



### 5.3 Weather and Road Condition

**Table 5.3.1**  
**Fatal Collisions By Road Condition**

Year	Dry	Ice	Snow/Slush	Unknown	Wet
2003	9	0	0	1	5
2004	18	0	0	0	3
2005	15	2	0	1	2
2006	18	0	0	0	2
2007	11	0	1	0	4
2008	10	0	0	0	6
2009	4	0	0	1	2
2010	5	0	0	0	3

**Table 5.3.2**  
**Injury Collisions By Road Condition**

Year	Dry	Ice	Oil	Other	Sand/Mud/Dirt	Snow/Slush	Standing Water	Unknown	Wet
2003	690	16	0	3	0	2	0	7	341
2004	688	11	0	3	1	6	0	6	299
2005	744	33	1	2	2	8	0	6	278
2006	725	30	1	0	0	3	2	9	333
2007	615	40	0	3	0	15	0	5	259
2008	491	35	0	1	3	16	0	7	267
2009	500	39	0	3	2	9	1	3	181
2010	372	15	0	2	2	6	0	5	198

**Table 5.3.3**  
**Property Damage Collisions By Road Condition**

<b>Year</b>	<b>Dry</b>	<b>Ice</b>	<b>Oil</b>	<b>Other</b>	<b>Sand/Mud/Dirt</b>	<b>Snow/Slush</b>	<b>Standing Water</b>	<b>Unknown</b>	<b>Wet</b>
2003	1038	24	1	1	2	12	0	38	563
2004	1089	26	0	3	3	30	2	33	515
2005	1165	58	2	5	2	16	0	40	514
2006	1052	71	2	5	4	16	5	35	570
2007	955	90	0	2	2	37	2	44	570
2008	847	66	0	4	1	61	0	22	520
2009	866	72	0	4	4	35	4	26	374
2010	633	28	0	2	1	26	1	18	424

**Table 5.3.4**  
**Fatal Collisions By Weather Condition**

<b>Year</b>	<b>Clear or Partly Cloudy</b>	<b>Fog or Smog or Smoke</b>	<b>Other</b>	<b>Overcast</b>	<b>Raining</b>	<b>Unknown</b>
2003	9	0	0	4	1	1
2004	14	1	0	3	3	0
2005	12	0	1	5	2	0
2006	13	1	0	5	1	0
2007	10	0	0	3	3	0
2008	6	1	0	7	2	0
2009	2	0	0	4	0	1
2010	5	0	0	2	1	0

**Table 5.3.5**  
**Injury Collisions By Weather Condition**

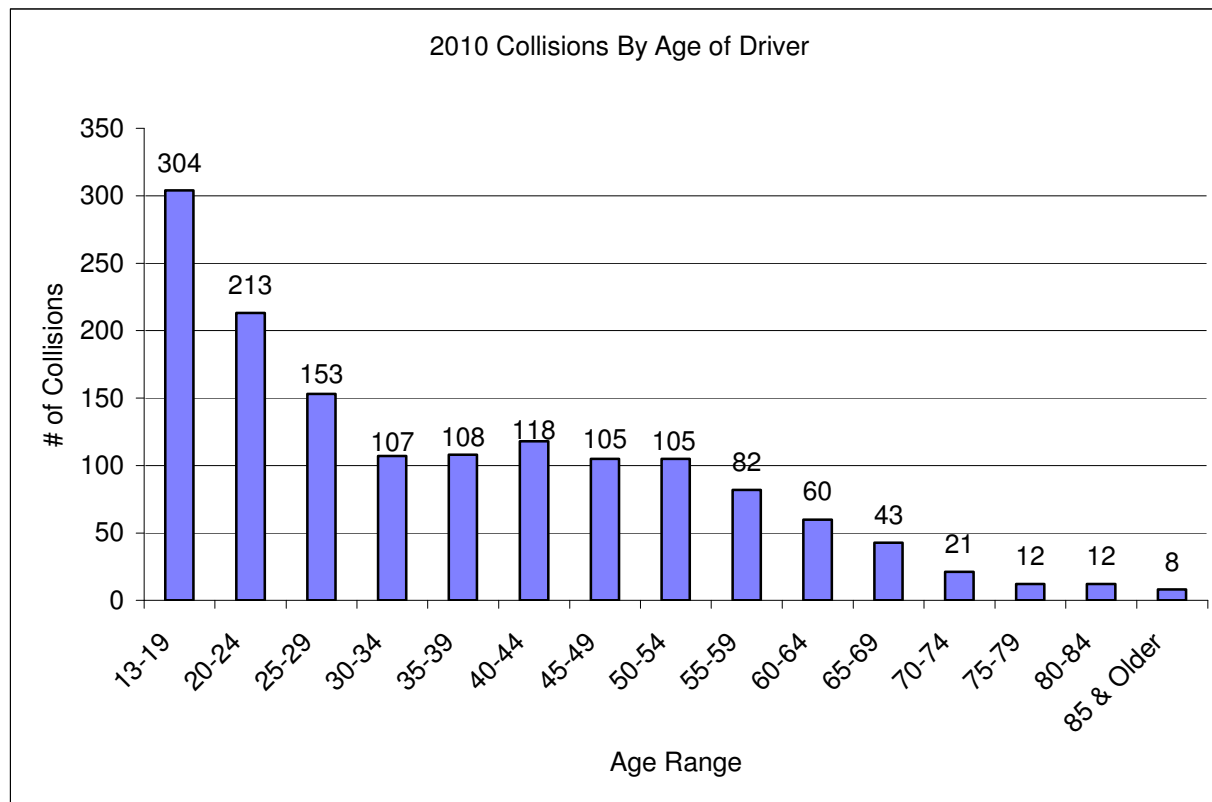
<b>Year</b>	<b>Blowing Sand, Dirt or Snow</b>	<b>Clear or Partly Cloudy</b>	<b>Fog, Smog or Smoke</b>	<b>Other</b>	<b>Overcast</b>	<b>Raining</b>	<b>Severe Crosswind</b>	<b>Sleet or Hail or Freezing Rain</b>	<b>Snowing</b>	<b>Unknown</b>
2003	0	642	13	2	172	210	1	3	3	13
2004	0	615	16	3	182	182	0	1	3	12
2005	2	692	15	2	169	167	0	10	7	10
2006	0	681	14	1	163	215	2	2	2	23
2007	0	573	13	3	171	154	1	1	10	11
2008	0	467	6	2	169	147	0	2	19	8
2009	0	479	11	1	108	119	0	4	12	4
2010	1	344	6	0	85	151	1	0	6	6

**Table 5.3.6**  
**Property Damage Only Collisions**  
**By Weather Condition**

<b>Year</b>	<b>Blowing Sand or Dirt or Snow</b>	<b>Clear or Partly Cloudy</b>	<b>Fog or Smog or Smoke</b>	<b>Other</b>	<b>Overcast</b>	<b>Raining</b>	<b>Severe Crosswind</b>	<b>Sleet , Hail or Freezing Rain</b>	<b>Snowing</b>	<b>Unknown</b>
2003	1	952	13	2	269	372	1	4	15	50
2004	2	980	41	5	284	314	2	2	25	46
2005	0	1088	28	11	300	302	3	9	13	48
2006	0	1008	13	10	276	372	2	1	18	60
2007	2	930	8	7	309	354	2	4	30	56
2008	0	797	8	5	294	330	0	5	41	41
2009	0	828	32	3	198	257	1	5	29	32
2010	0	605	7	5	182	287	0	1	23	23

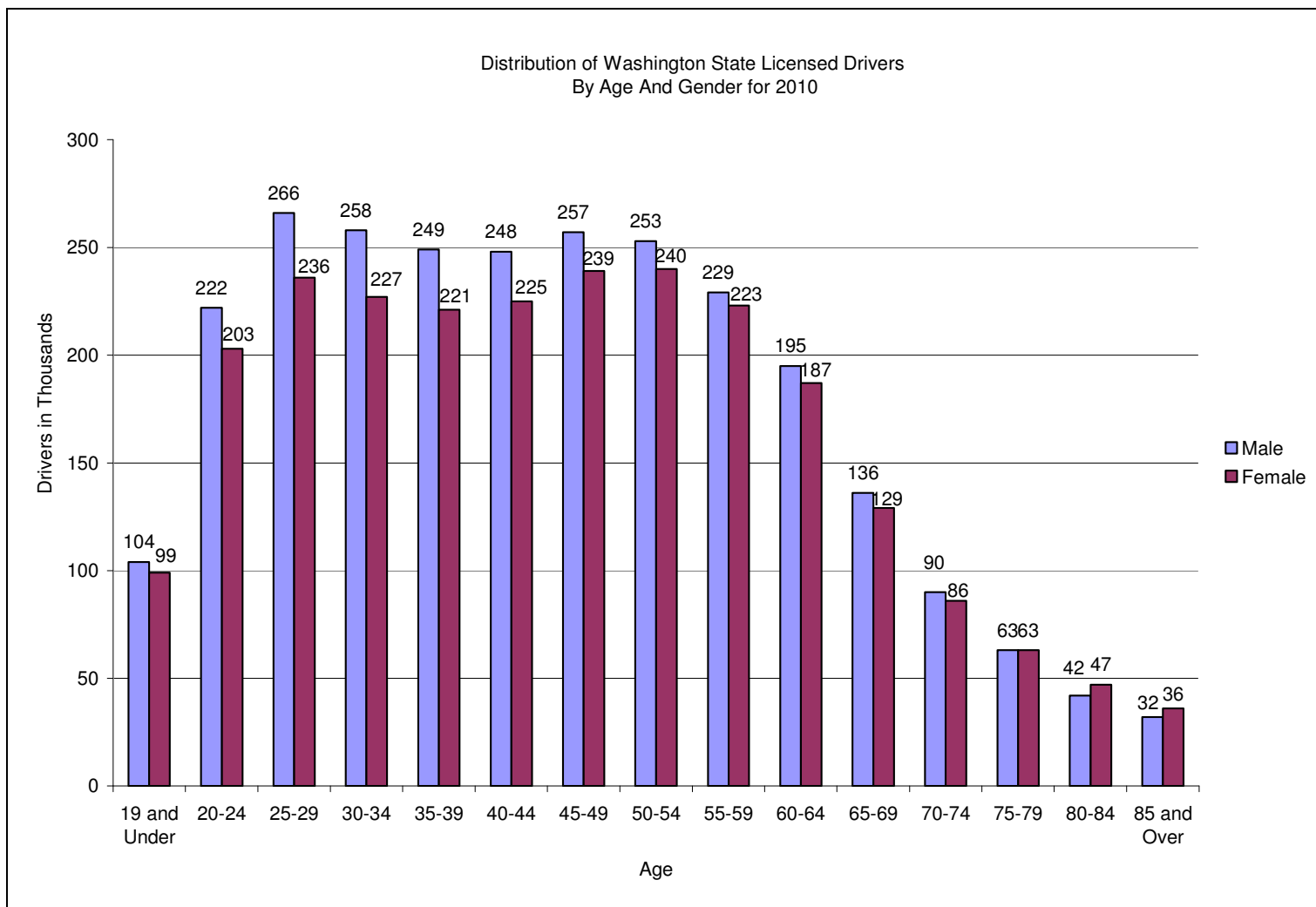
## 5.4 Demographics

**Figure 5.4.1**  
**2010 Collisions**  
**By Age of Driver**



*Note: 290 Collisions did not identify the Date of Birth for Driver of Vehicle 1*

**Figure 5.4.2**  
**Distribution of Washington State Licensed Drivers**  
**By Age and Gender for 2010**



**Table 5.4.1**  
**Number of Washington State Licensed Drivers**  
**By Age and Gender for 2010**

Age	Male	Female	Total
19 and Under	104	99	204
20-24	222	203	425
25-29	266	236	502
30-34	258	227	484
35-39	249	221	470
40-44	248	225	473
45-49	257	239	495
50-54	253	240	493
55-59	229	223	452
60-64	195	187	382
65-69	136	129	265
70-74	90	86	175
75-79	63	63	126
80-84	42	47	90
85 and Over	32	36	69

**SOURCE:** U.S. Department of Transportation, Federal Highway Administration,  
*Highway Statistics 2010*, Washington, DC: 2010



**Table 5.4.2**  
**Leading Contributing Circumstance**  
**For Drivers between the ages of 16-25 during 2010**

<b>Leading Contributing Circumstance</b>	<b>16 Yrs</b>	<b>17 Yrs</b>	<b>18 Yrs</b>	<b>19 Yrs</b>	<b>20 Yrs</b>	<b>21 Yrs</b>	<b>22 Yrs</b>	<b>23 Yrs</b>	<b>24 Yrs</b>	<b>25 Yrs</b>	<b>Totals</b>
Exceeds Reas.Safe Speed	18	32	33	21	15	13	14	7	8	9	170
Did Not Grant RW to Vehicle	12	15	16	11	8	6	6	2	4	3	83
Under Influence of Alcohol	2	1	3	5	5	4	7	4	4	6	41
Other	2	8	1	1	4	3	2	3	6	2	32
Exceeding Stated Speed Limit	4	1	12	3	2	3	1	2	3	0	31
Follow Too Closely	4	5	8	4	3	2	2	0	1	1	30
Inattention	5	3	3	2	3	2	2	1	2	0	23
Over Center Line	2	3	3	0	2	3	1	2	1	0	17
None	0	5	0	1	1	1	1	1	2	0	12
Apparently Asleep	0	2	2	2	1	3	0	0	1	0	11
Disregard Stop Sign – Flashing Red	0	0	4	0	2	1	0	0	3	1	11
Operating Defective Equipment	0	1	5	1		1	2	0	0	0	10
Disregard Stop and Go Light	1	0	2	1	1	1	0	2	1	0	9
Driver Interaction with Passengers, Animals	2	1	0	1	2	2	1	0	0	0	9
Other Driver Distractions Inside Vehicle	0	0	2	2	2	1	0	0	0	1	8
Improper Backing	0	1	2	2	0	0	0	0	0	1	6
Driver Distractions Outside Vehicle	0	2	1	0	0	0	0	0	1	1	5
Improper Turn	0	0	0	2	0	1	0	1	1	0	5
Driver Adjusting Audio or Entertainment	0	1	0	0	1	0	0	0	2	0	4
Apparently Fatigued	0	0	1	1	0	0	0	0	1	0	3
Driver Eating or Drinking	1	0	0	0	0	0	0	0	1	1	3
Improper U-Turn	0	0	1	0	0	1	0	0	0	1	3

## 5.5 Contributing Circumstances

**Table 5.5.1**  
**Collisions By Contributing Circumstance**

<b>Contributing Circumstance</b>	<b>2003-2010</b>
Exceeding Reasonable Safe Speed	4667
Did Not Grant RW to Vehicle	3184
Other	2460
Under Influence of Alcohol	1307
Following Too Closely	1150
Inattention	916
Exceeding Stated Speed Limit	801
None	667
Disregard Stop and Go Light	436
Disregard Stop Sign - Flashing Red	409
Over Center Line	391
Apparently Asleep	344
Improper Backing	305
Improper Turn	285
Improper Passing	238
Operating Defective Equipment	227
Improper U-Turn	197
Fail to Yield Row to Pedestrian	168
Apparently Ill	130
Driver Distractions Outside Vehicle	145

**Table 5.5.2**  
**Injury Collisions By Contributing Circumstance**

<b>Contributing Circumstance</b>	<b>2003-2010</b>
Exceeding Reasonable Safe Speed	1760
Did Not Grant Right of Way to Vehicle	1188
Under Influence of Alcohol	612
Following Too Closely	441
Other	480
Exceeding Stated Speed Limit	325
Inattention	317
None	285
Disregard Stop and Go Light	194
Disregard Stop Sign - Flashing Red	171
Fail to Yield Right of Way to Pedestrian	159
Over Center Line	152
Apparently Asleep	140
Apparently Ill	92
Operating Defective Equipment	71
Improper U-Turn	68
Improper Passing	61
Improper Turn	66
Driver Distractions Outside Vehicle	49
Under Influence of Drugs	43
Other Driver Distractions Inside Vehicle	36
Driver Interacting with Passengers, Animals	35
Improper Backing	21
Driver Operating Handheld Telecommunication Device	24
Unknown Driver Distraction	24
Apparently Fatigued	14
Driver Adjusting Audio or Entertainment	14

**Table 5.5.3**  
**Fatal Collisions By Contributing Circumstance**

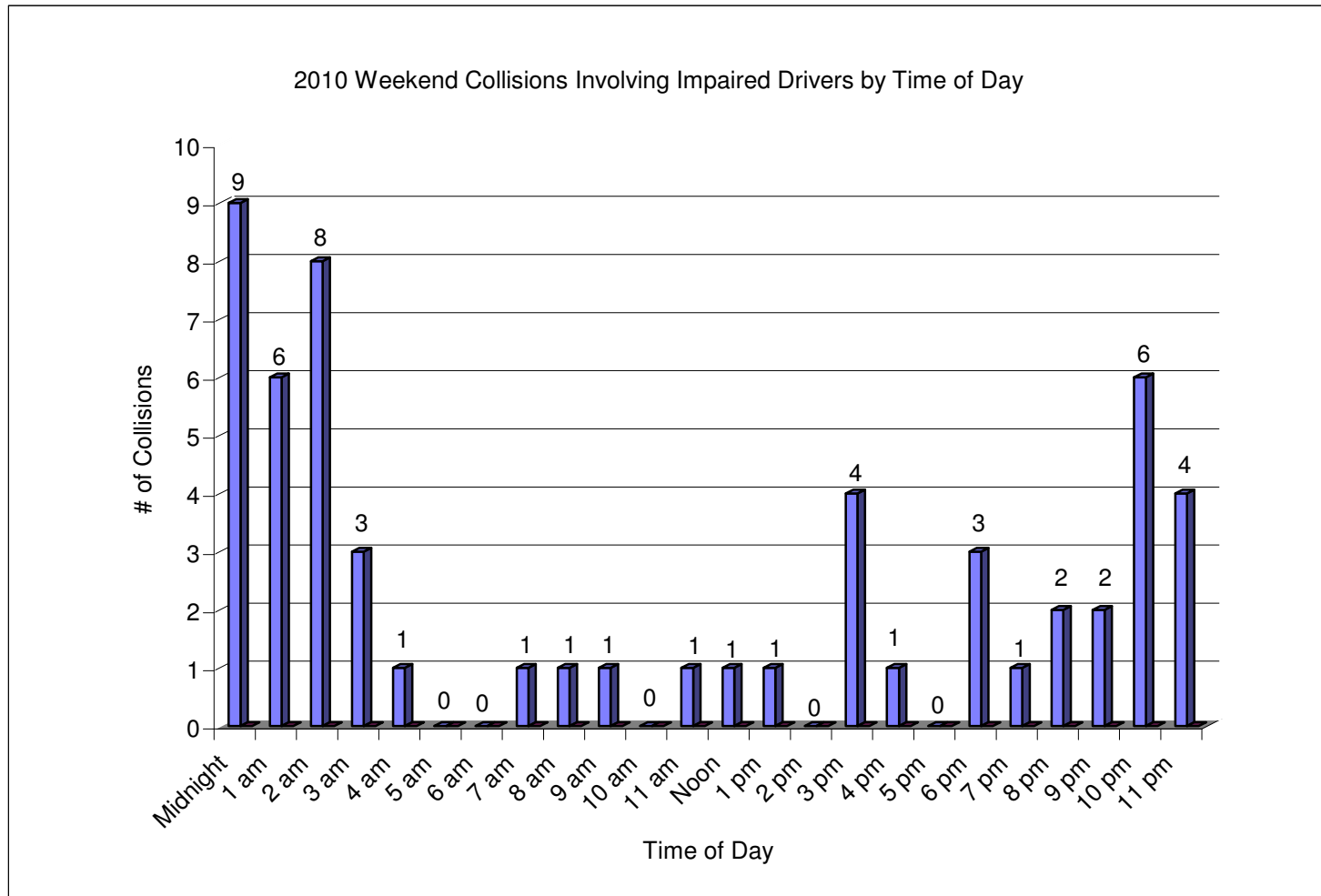
<b>Contributing Circumstance</b>	<b>2003 - 2010</b>
Under Influence of Alcohol	32
Exceeding Stated Speed Limit	24
Exceeding Reasonable Safe Speed	14
Other	11
Did Not Grant Right of Way to Vehicle	10
Over Center Line	9
Fail to Yield Right of Way to Pedestrian	5
Inattention	4
None	3
Improper Passing	2
Apparently Ill	1
Under Influence of Drugs	1

## 5.6 Impairment

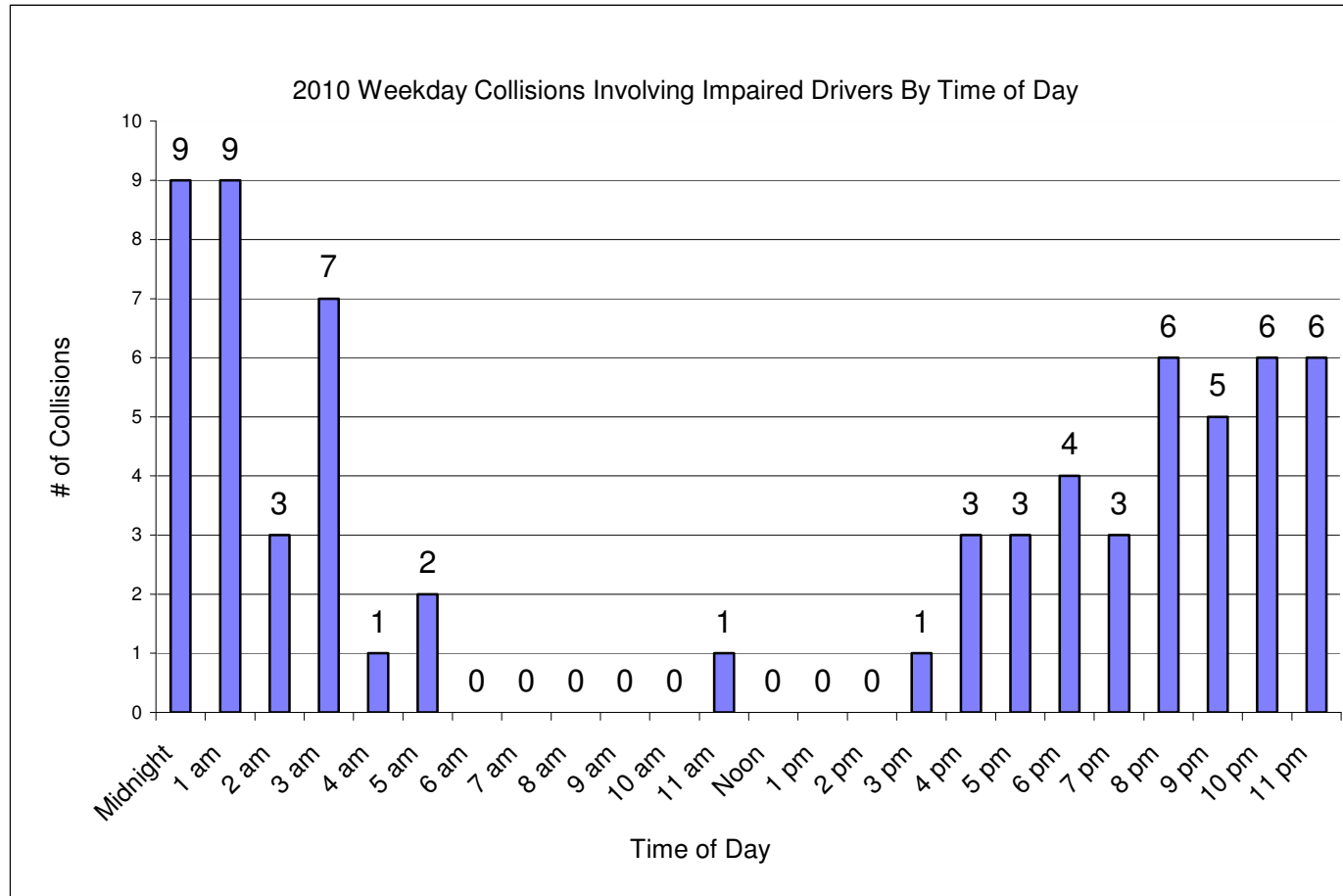
**Table 5.6.1**  
**Collisions Involving**  
**Drivers Under the Influence (DUI)**

Year	Fatal	Percent of All Fatal Collisions	Injury	Property Damage Only
2003	4	27%	86	91
2004	7	33%	82	98
2005	11	55%	111	106
2006	9	45%	123	118
2007	4	25%	96	99
2008	6	38%	79	80
2009	3	43%	73	101
2010	2	25%	63	60

**Figure 5.6.1**  
**2010 Weekend Collisions for**  
**Drivers under the Influence**  
**By Time of Day**



**Figure 5.6.2**  
**2010 Weekday Collisions for**  
**Drivers under the Influence**  
**By Time of Day**



## 5.7 Speed

**Table 5.7.1**  
**Speeding as a Contributing Circumstance in**  
**Fatal, Injury, and Property Damage Collisions**

<b>Year</b>	<b>Fatal</b>	<b>Injury</b>	<b>Property Damage Only</b>
2003	4	294	459
2004	8	292	409
2005	5	278	447
2006	5	319	459
2007	5	273	476
2008	7	236	438
2009	4	226	350
2010	2	167	305



## 5.8 Lighting Conditions

**Table 5.8.1**  
**2010 Collisions By**  
**Lighting Condition**

<b>Lighting Condition</b>	<b>Fatal</b>	<b>Injury</b>	<b>Property Damage Only</b>
Dark-No Street Lights	2	69	167
Dark-Street Lights Off	0	13	13
Dark-Street Lights On	3	108	229
Dawn	0	6	28
Daylight	3	365	617
Dusk	0	33	44
Other	0	0	1
Unknown	0	6	34
<b>Total</b>	<b>8</b>	<b>600</b>	<b>1133</b>

## 5.9 Economic Value of a Statistical Life (VSL) – Theoretical Willingness to Pay to Avoid Loss of Life

This assumes that the “Willingness to Pay to Avoid Loss of Life” in the United States is \$5.8 Million.  
This is not intended to put a price on the value of human life, only to be used as a cost benefit analysis tool.

**Table 5.9.1**  
**Estimated Value**  
**For Preventing 2010 Collisions**

Collision Severity	Number of Collisions	Economic Value	Estimated Avoidance Value
Fatal	8	\$6,200,000	\$49,600,000
Critical	0	\$3,676,600	\$0
Severe	0	\$1,649,200	\$0
Serious	56	\$651,000	\$36,456,000
Moderate	200	\$291,400	\$58,280,000
Minor	344	\$18,600	\$6,398,400
Non-Injury	1133	\$0	\$0
Total			\$150,734,400

Source: United States Department of Transportation – Treatment of the Economic Value of a Statistical Life Independent Analysis – 2011 Adjustment

